

ITALIAN STRATEGY FOR METHANE EMISSIONS

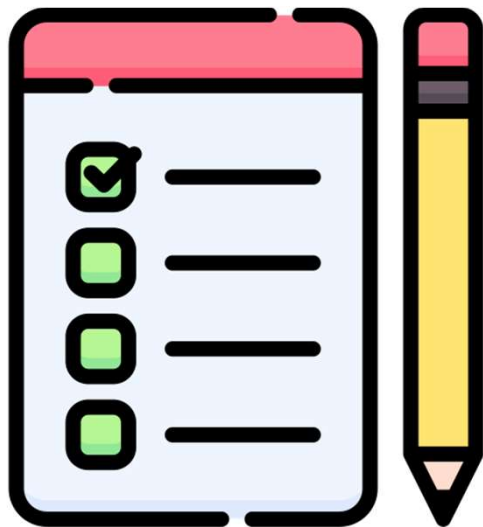
Round Table and the strategy document for emission reduction

Tommaso Franci, Amici della Terra

OMC 2023

Ravenna, 24 ottobre 2023





AGENDA

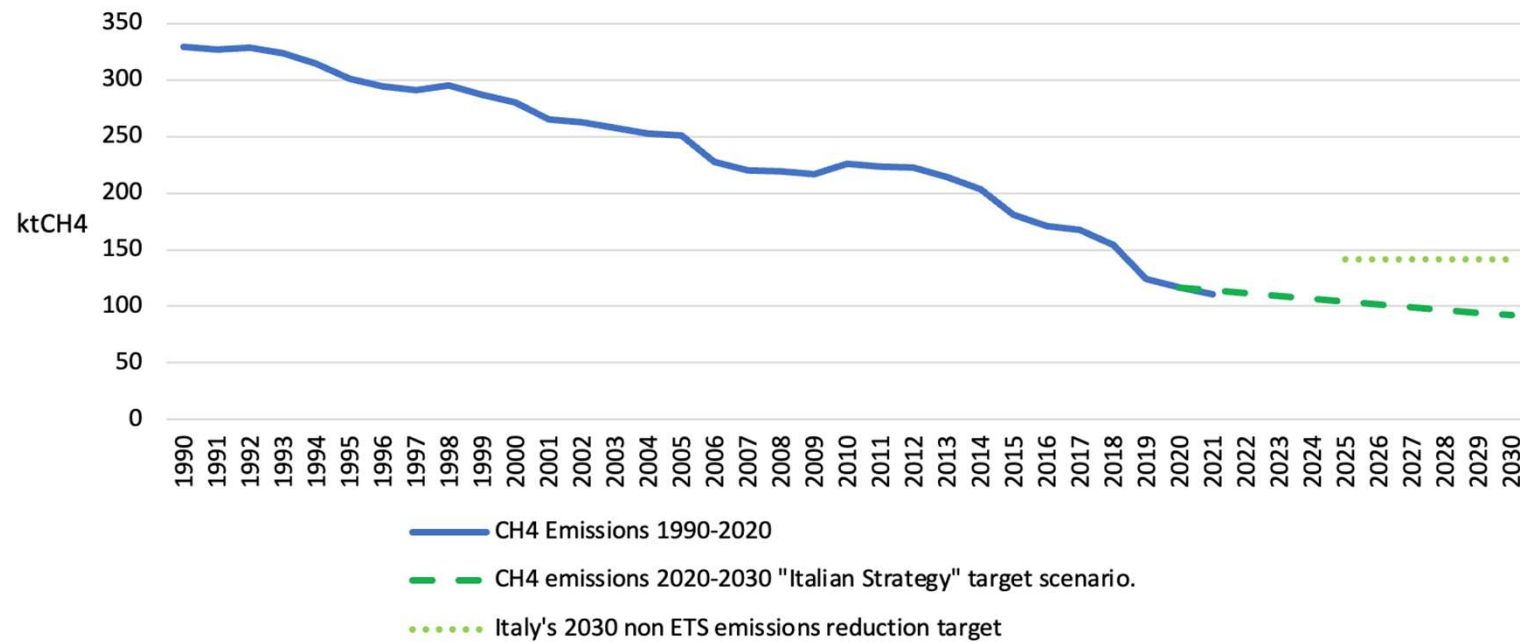
1. A few numbers...
2. The Round Table and the «Italian Strategy»
3. «Italian Strategy» implementation status
4. The next future
5. MMRV Framework Italian participation

Italian strategy for methane emissions

1. A few numbers...

Methane emissions in Italy. Reduction positive trend, with increasing attention on the issue

Methane emissions of the natural gas supply chain 1990-2030



Source:
Amici della Terra
elaboration on
NIR data of ISPRA



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Italian strategy for methane emissions

1. A few numbers...

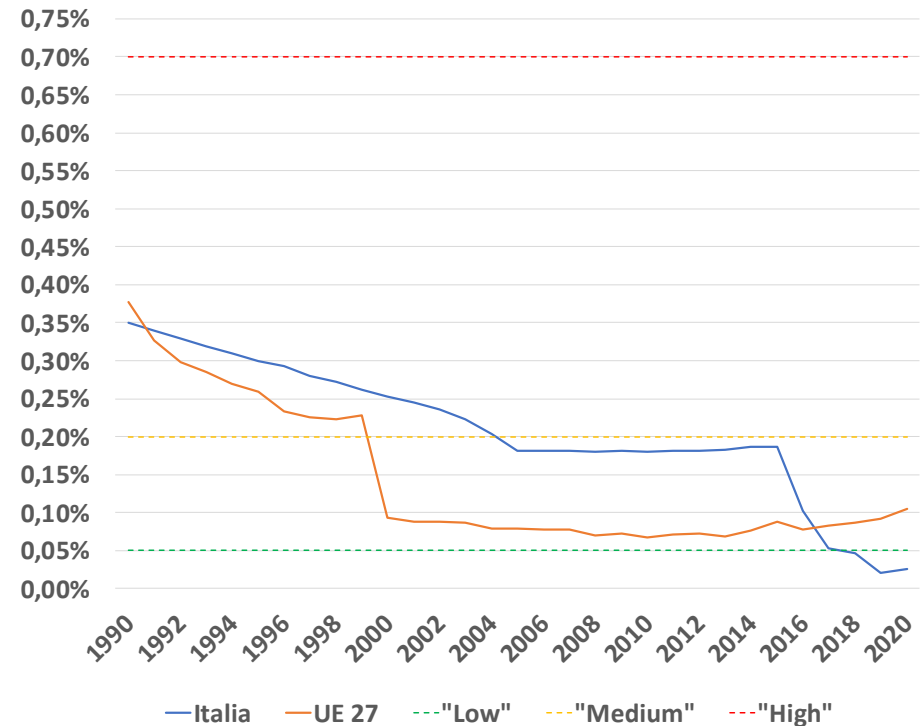
Methane Intensity

Percentage (%) by mass of CH₄ emissions relative to the amount of natural gas in a certain segment of supply chain. Is used to estimate up-stream (*production* and *processing*) emissions relative to the natural gas production volume. Here is the percentage value of the sum of emissions of the 2 segments (ktCH₄) to the volume of gas production fed into the transmission network (kt of gas).

1990	Italy M.I.= 0.35%	UE27 M.I.= 0.38%
2020	Italy M.I.= 0.03%	UE27 M.I.= 0.11%

Data revision in NIR '22 at emission factors level and also reduction in activity levels are reflected in Italian M.I. performance, wich decreased from 0.19% to 0.03% from 2014 to 2020.

There is a strong discontinuity too in the EU27 data, starting in 1999. The drop in value between '99 and 2000 is largely due to the revision of Romanian data (recent update of its emission factors).



Source: Amici della Terra elaboration on NIR data of ISPRA and EEA



Italian strategy for methane emissions

2.1 The Round Table for methane emissions reduction in the natural gas supply chain

- **February 2021:** Amici della Terra, supported by EDF Europe, promotes the Round Table for methane emissions reduction in the natural gas supply chain.
- **October 2021:** AdT, Adriatic LNG, ANIGAS, ENI, EDFE, Fiorentini, INRETE distrib., Italgas, Picarro, SNAM e Unareti shared a «Methane emissions reduction Strategy» document, by voluntarily making a series of commitments. ARERA, CIG, FSR, ISPRA e UNEP-OGMP 2.0 participated.
- **Dicembre 2022:** document updating, shared by: AdT, Aiget, Assogas, Assorisorse, Edison, ENI, EDF Europe, Fiorentini, INRETE distrib., Italgas, S.L. Parola-Angelini, Picarro, Proxigas, SNAM, Unareti e Utilitalia. ARERA, CIG, ISPRA e UNEP-OGMP 2.0 participated.
- From early 2023 to the present: Round Table participation in the public consultation for the italian NPEC updating proposal. The Government has significantly incorporated of the issue into the document (pagg. 166-169) sent to Brussels, with mention on round table activities. Continuation of activities (subgroups), post-meter document.



Italian Strategy for methane emissions

2.1 The Round Table for methane emissions reduction in the natural gas supply chain

NEWS 2023

➤ Subgroups activities

○ IMPORT

- Focus on emission footprint of imported gas: more than 85% of that of total European consumption;
- EU regulation will include reporting requirements for importers and European database constitution;
- Focus on emissions in the LNG supply chain: costs, load tracking, cargo nature;
- existing contracts, future contracts and related responsibilities;
- possible standard contracts clauses to be included in contracts.

○ POST-METER

- emission quantification/measurement (outdated German emission factor);
- representative statistical sample and different user facilities;
- smart meters;
- safety logic vs. environmental logic;
- continuous measurement, spot measurement (installation, repair or restore) and spot checks.

➤ Increase number of participants



Italian Strategy for methane emissions

2.2 The Round Table's «Italian Strategy»



INDIRIZZI PER UNA STRATEGIA ITALIANA SULLE EMISSIONI DI METANO DELLA FILIERA DEL GAS NATURALE



Il presente documento "Indirizzi per una Strategia italiana sulle emissioni di metano della filiera del gas naturale" è il frutto dell'attività, confronto e approfondimento del Tavolo di lavoro promosso dagli Amici della Terra in collaborazione con Environmental Defense Fund (EDF) dedicato a questo tema e dei contributi offerti dai partecipanti.

I contenuti del documento sono stati condivisi da ANGET, Amici della Terra Onlus, Assogas, Assorisorsa, Eni S.p.A., Environmental Defense Fund Europe (EDF Europe), INRETE distribuzione energia S.p.A., Italgas S.p.A., Picarro Inc., Pietro Fiorentini S.p.A., Proxigas, Snam S.p.A., Unareti S.p.A.

Si ringraziano ARERA, Comitato Italiano Gas (CIG), Florence School of Regulation (FSR), ISPRA e UNEP-ODMP 2.0 per la partecipazione, per i commenti e per la collaborazione ai lavori del Tavolo di confronto.

Tavolo di lavoro per una strategia italiana sulle emissioni di metano della filiera del gas naturale
Segreteria L'As Amici della Terra Onlus - Via Ippolito Nievo 62 00153 Roma, Tel 066675308

“Guidelines for an Italian Strategy for methane emissions of natural gas supply chain” document is the result of the activity, discussion and insight of the Round Table and the contributions of the participants.

Downloadable from Amici della Terra website:

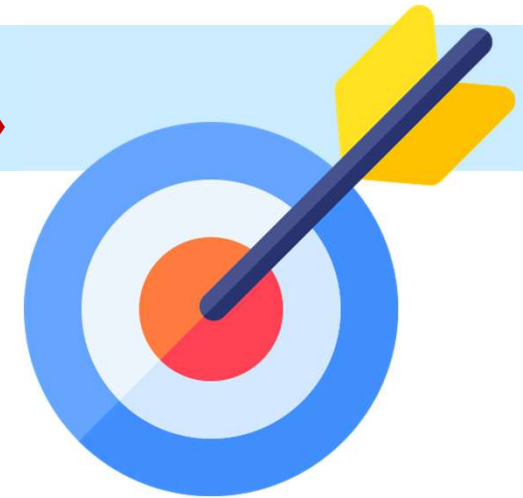
https://www.amicidellaterra.it/images/metano/STRATEGIA_CH4_2022_web.pdf



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Italian Strategy for methane emissions

2.2 The Round Table's «Italian Strategy»



- **Overall** reduction target to 2030 (compared to 1990): **72%**
- **Transport** reduction target to 2030 (compared to 1990): **65%**
- **Distribution** reduction target to 2030 (compared to 1990): **70%**
- Standard performance target (**M.I.**): minimum 0,2% upstream in Italy
- **NIR** data quality **improvement** with Tier 3 level or minimum Tier 2
- Assign ISPRA the task and the resources to prepare a specific **Annual Report** of methane emission monitoring and entrusting ISPRA with the task of representing Italy at IMEO



Italian Strategy for methane emissions

2.2 The Round Table's «Italian Strategy»

- Adoption of updated technical standards for MRV and LDAR activities to reduce emissions consistent with best available technologies
- ARERA: adoption of additional **incentive** and **support regulatory elements** for the dissemination of MRV and LDAR best practices in the transportation, storage, regasification and distribution sectors to achieve emission reduction targets
- Promotion of a targeted approach to the use of **best available technologies**
- **Information** and **communication** for external audiences
- Definition of governance tools for the "Strategy"
- Definition of information standards that enable **bilateral reciprocity agreements** to promote the adoption of a reporting system based on a reliable MRV shared by all operators in the supply chain of gas produced or imported into Italy, also in view of the possible future implementation of economic instruments that consider the Methane Footprint of gas imported into Italy, in accordance with the provisions on this matter of the European Commission



Italian Strategy for methane emissions

3. «Italian Strategy» implementation status

The Italian NIR 2022 data show that:

- a **reduction trend** in line with the «Italian Strategy» is confirmed for 2020 (-72% compared to 1990);
- first significant progress in improving the **quality of NIR data** is manifested;
- there is a **reduction** in **M.I.** values in the upstream.

ISPRA has published a specific report: “*The methane in the GHG emission inventory – Italy and the Global Methane Pledge*” (27/9/22) (<https://www.isprambiente.gov.it/it/pubblicazioni/rapporti/il-metano-nell2019inventario-nazionale-delle-emissioni-di-gas-serra-l2019italia-e-il-global-methane-pledge>)

In the absence of adequate data, the biggest unknown of gas consumed in Italy is that of emissions on **IMPORT** (96% in 2021), so it is **difficult to know** those due to production and transport activities from the main exporting countries (Russia, Algeria, Azerbaijan and Qatar).

IEA data estimate that import-related emissions in Italy range between a minimum of those totally generated by the supply chain in our territory (ca. 4Mt CO₂ eq) and a probable maximum at least double if not more.



Italian Strategy for methane emissions

3. «Italian Strategy» implementation status

In a short time there has been a strong acceleration in methane emission reduction policies:

- launch of **GMP**: commitment to 30% reduction (to 2030 from 2020) of all methane emissions;
- establishment of the **IMEO**, in synergy with OGMP 2.0 at UNEP;
- launch of the **EU Methane Strategy**: reference for methane emission reduction policies;
- proposed EU methane Regulation (trialogue);
- **EU External Energy Strategy** (RePowerEU): incorporate cooperation on collective emission reduction strategies as part of gas supply diversification by directly providing for precise emission reduction commitment in new import agreements (exporters-importers collaboration).

To implement these initiatives, we need consistent and shared data at national, EU and international levels

Framework for the Round Table: further update of the «**Strategy**», participants expansion and greater role of the Italian government.



Italian Strategy for methane emissions

4. The next future

Italian NPEC updating

After the submission of the proposal of updating NPEC by the Italian government (june 2023), Round Table target will be to have directions for achieving the goals also incorporated into the final NPEC, through the targets and tools suggested by the Round Table (june 2023 - june 2024)

IMPORT and POST-METER

Standard contract clauses definition and post-meter emissions document

EU REGULATION

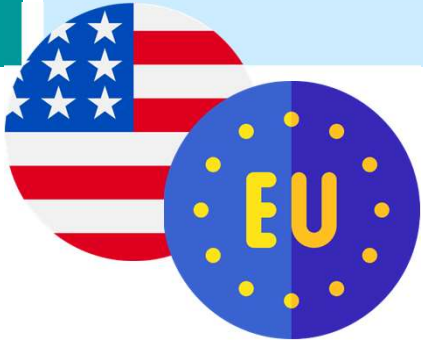
Initiatives for its implementation, once the approval process is completed

EVENTS: Annual public round table meeting and COP28 side event



Italian Strategy for methane emissions

5. MMRV Framework Italian participation



GHG Supply Chain Emissions MMRV Framework

Stakeholder Representative Group

The EU and U.S. government (GMP context) have launched a new initiative on import emissions, aimed at promoting a voluntary adherence scheme to reduce the emission footprint of imported gas.

OBJECTIVE: standardization of available information of gas traded on the international market so that the one with the least emissions can be chosen.

Each of the adhering countries was asked to name 4 stakeholders who could provide relevant input and supporting guidance to the Technical Groups.

Italian Government has designated: Amici della Terra, Assorisorse, CIG e Proxigas



Italian Strategy for methane emissions

Contacts

Round Table for an Italian Strategy on methane emissions of natural gas supply chain

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<https://www.amicidellaterra.it/index.php/studi-e-attivita/energia/emissioni-di-metano>

THANKS FOR YOUR ATTENTION



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